PEOPLES NATURAL GAS

(Dubuque, Iowa)

GENERAL DESCRIPTION

The 10-acre site is located in downtown Dubuque, in the W 1/2 of the SE 1/4 of Section 19, T89N, R3E, Dubuque County, Iowa, and is bordered by East Eleventh Street, Kerper Boulevard, and the Soo Line Railroad. The site is co-owned by the city of Dubuque and the state of Iowa. The previous site owner was Peoples Natural Gas. Midwest Gas is the responsible party for the cleanup of the site. The site was entered on the Registry in August 1989. The EPA placed the site on the National Priorities List (NPL) in August 1990.

SITE CLASSIFICATION

The site is classified "b" in accordance with 455B.427.3. Hazardous substances have been disposed of at the site, posing a significant threat to the environment.

TYPE AND QUANITY OF HAZARDOUS WASTE

A manufactured gas plant operated at the site from the early 1900s until 1954. During its operation, coal tar sludges, cyanide-bearing iron oxide waste, and other associated gasification wastes were generated. Some of these wastes were disposed of at the site. The city of Dubuque operates a Public Works Garage (with leaking underground storage tanks) on the eastern part of the site. The disposed wastes at the site are in contact with groundwater.

TABLE 1
Groundwater Contamination

Compound	**Highest Value** (ug/L)	**Compound**	**Highest Value** (ug/L)
Benzene	**4,400**	Anthracene	180
Toluene	**2,000**	Fluoranthene	220
Styrene	**1,300**	Pyrene	170
Phenol	**9,800**	Benzo(a)anthracene	**100**
Cresols	30,000	Chrysene	**78**
2,4-Dimethylphenol	**25,000**	Benzo(a)fluoranthene	**92**
Naphthalene	**5,800**	Benzo(a)pyrene	**75**
2-Methylnaphthalene	830		
Acenaphthylene	630	Cyanide	**4,700**
Acenaphthene	220	Arsenic	**57**
Fluorene	**300**	Lead	**670**
Penanthrene	520	Iron	120,000

Values in Bold exceed Iowa Land Recycling Program standards for protected ground water

SUMMARY OF PUBLIC HEALTH AND ENVIRONMENTAL COMNCERNS

- **The Primary public health concern at this site is the protection of public drinking water. The primary environmental concern is for protection of surface water of the Mississippi and associated fish and wildlife.**

The city's municipal water wells are located about 1.6 miles north of the site. The Mississippi River is about 2000 feet east and Dove Harbor is about 500 feet east of the site. The Upper Mississippi River Wildlife and Fish Refuge is located 1.5 miles downstream of the site.

SUMMARY OF ASSESSMENT, MONITORING OR REMEDIAL ACTIONS

The EPA is the lead agency for the site.

Following discovery of coal tar residues at the site, the EPA began investigating the site in 1986. The results from samples collected from monitoring wells in 1987 showed groundwater contamination with several hazardous substances above state action levels. The highest concentrations found for these substances appear in Table 1. These substances also were found in high concentrations in on-site soil samples.

The EPA issued a CERCLA 106 Consent Order in 1989 calling for further evaluation of the site. The evaluation led to the selection and implementation of a removal action in September 1990 requiring both a removal action and a Remedial Investigation/Feasibility Study (RI/FS). The removal action included the excavation of contaminated soils. In November 1990 the excavation from the upper 22 feet of the site was completed. During the removal action, additional contamination was discovered 22 feet below grade beneath tar and ammonia tanks. A supplemental work plan was submitted for review in January 1991. This plan included soil removal, groundwater collection and treatment, and bioremediation to address contaminants not affected by the soil removal.

A Record of Decision (ROD) was completed in September 1991 for Remedial Action at the eastern portion of the site that included soil excavation, incineration and groundwater remediation. The final Remedial Design work plan was submitted for EPA approval in October 1992. The EPA approved a revised work plan, which was submitted in December 1992. Total Site excavation started after a 1992 Consent Order between EPA and Mid West Gas.

Field activities including monitoring well replacement, well sampling and a six-month bio-treatability study were conducted in 1993. The Preliminary Remedial Design was submitted to EPA in July 1993. The Interim Remedial Design was submitted for comments in October 1993. The draft "Aquifer Report" was submitted to EPA in August 1993. The Final Remedial Design was submitted in 1994. The Remedial Action Work plan was submitted in 1994 and approved by EPA. The in situ bioremediation field pilot study was ongoing in 1994.

Installation of a ground water extraction and treatment system was completed in 1996. A deep-aquifer monitoring program was approved. Phase II soil removal activities consisting of additional excavation were completed in 1998. An enhanced bio-treatment system began operation in 2000.

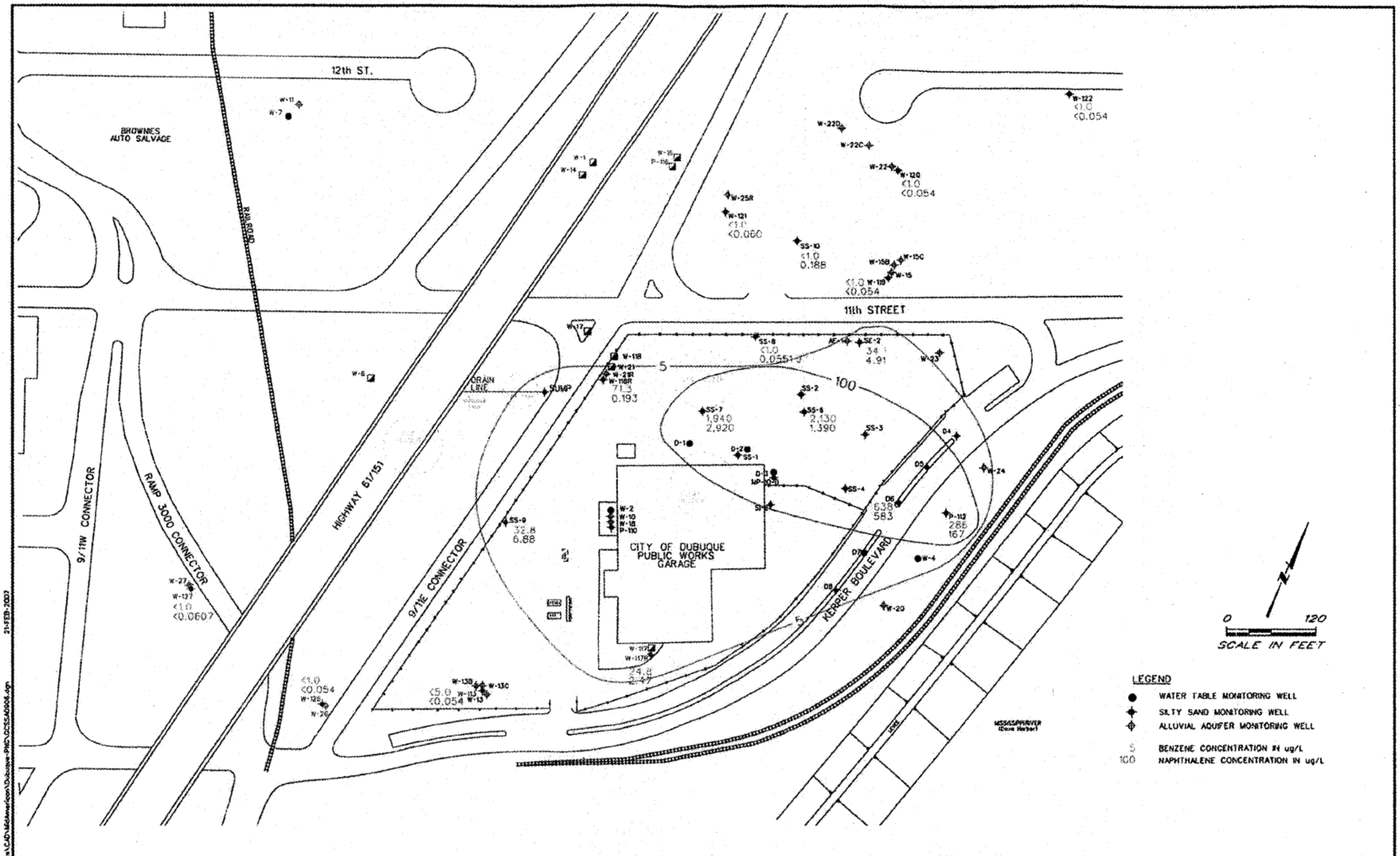
2004: In 2004 the remediation of contaminated groundwater was reevaluated. Additional assessment activities are planned related to defining the extent of free-phase coal tars and additional groundwater monitoring.

2005: EPA has completed the second five-year review for the site during the fall of 2005. During the review it was noted the current remedial efforts were not performing as desired and MidAmerican Energy Company needed to address the shortcomings. In November 2005 MidAmerican Energy submitted a Technical Impracticability Evaluation Report showing it was not practicable to recover the remaining contamination. As of December 2005 the report is under review by EPA and the IDNR.

2006: In December 2006 Mid American Energy has requested a Petition for Technical Impracticability Waver for the site. Mid American Energy states that it is technically impracticable from an engineering perspective to comply with performance standards for the groundwater within the TI zone. The EPA is currently reviewing the waver request.

2007: The RP continues to monitor natural attenuation parameters in the groundwater.

2008: The 5 year review was completed with no major discrepancies found. The RP will continue to monitor natural attenuation parameters in the groundwater.

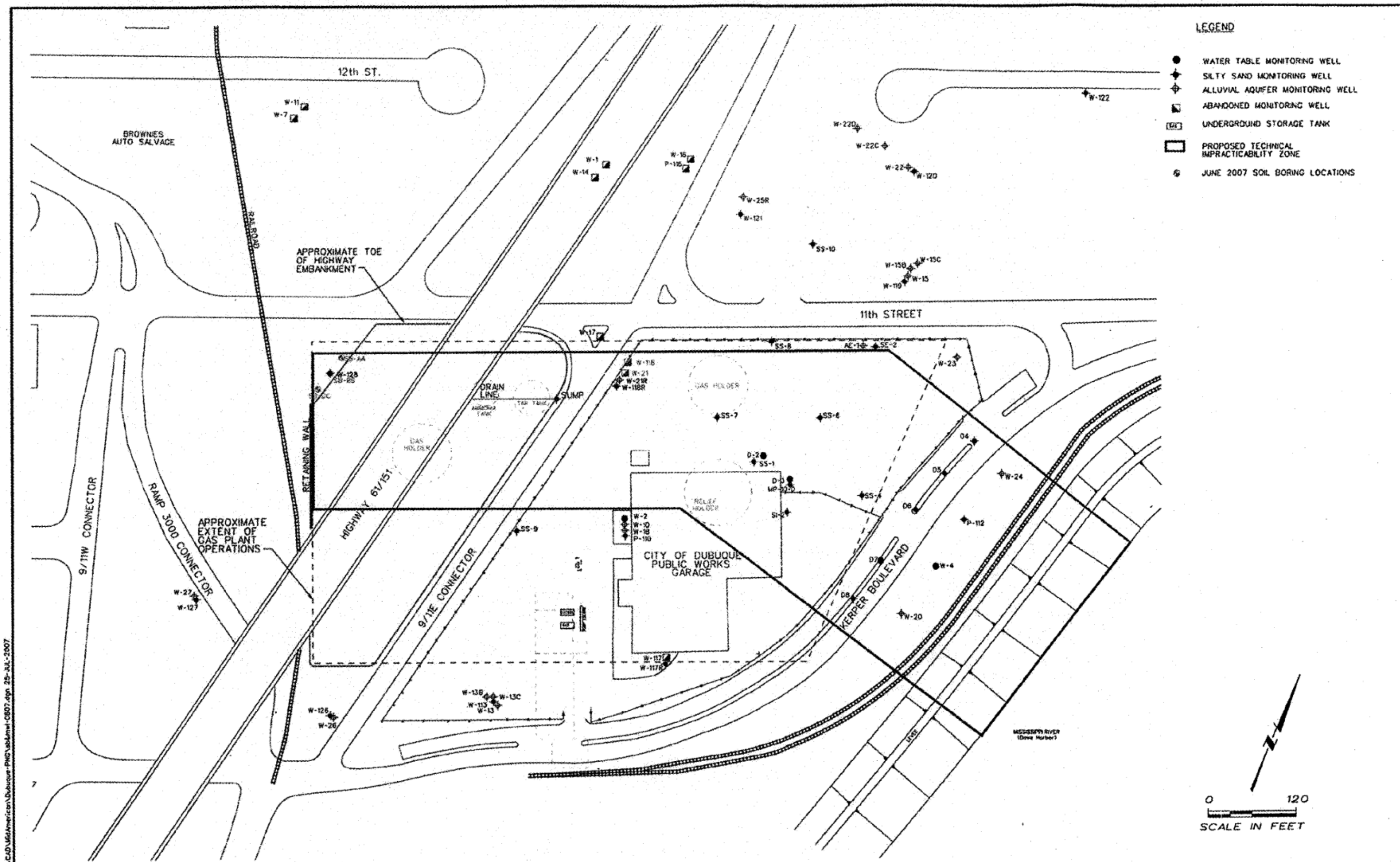


MWH Des Moines Iowa

MIDAMERICAN ENERGY COMPANY
PEOPLE'S NATURAL GAS SITE
DUBUQUE, IOWA

GROUNDWATER CONTAMINANTS
SILTY SAND AQUIFER
(SEPTEMBER 11, 2006)

FIGURE 1



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Des Moines
Iowa

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PEOPLE'S NATURAL GAS SITE
DUBUQUE, IOWA

JUNE 2007 SOIL BORING
AND MONITORING WELL LOCATION

FIGURE
1